

# **RFCA Stakeholder Focus Group**

## **August 30, 2000**

### **Meeting Minutes**

#### **Introduction and Administrative**

Reed Hodgin began the meeting with a review of the Focus Group purpose:

Discuss the wide range of environmental clean-up actions and decisions needed to safely close Rocky Flats

- Address issues holistically
- Explore interrelationships and implications among issues
- Provide focal point for discussion of decision documents
- Provide forum for communication and information exchange.

The group discussed the role of the focus group in decision-making on clean-up at Rocky Flats. Reed emphasized that the focus group would influence the decisions that the RFCA parties will make through the discussions at these meetings. A member of the Focus Group asked if the Focus Group would replace other public involvement processes, such as CERCLA public comment. Reed answered: no, the Focus Group is an opportunity for early and continuing public involvement, and will not replace other groups or processes.

Reed led introductions of participants at the meeting. A participants attendees list is included as Appendix A to these minutes. Reed summarized the Agenda for the evening. The Agenda included the following topics:

- Introductions and agenda review,
- Summary presentation on surface water quality,
- Focus Group discussion on surface water quality,
- Topics for upcoming meetings, and
- Radionuclide Soil Action Level (RSAL) update by the U.S. Department of Energy (DOE), U.S. Environmental Protection Agency (EPA), and the Colorado Department of Public Health and Environment (CDPHE) representatives

A request was made to review the minutes of the previous meeting at the beginning of each Focus Group meeting. A correction was made to the August 16, 2000 minutes.

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The minutes did not mention that Ken Korkia of the Rocky Flats Citizens Advisory Board had agreed to lead an offline discussion on the Community Acceptance criterion on the Comprehensive Environmental Liability and Compensation Act (CERCLA) list of nine criteria. It was again requested that comments and suggestions be sent to Ken. No other corrections to the August 16, 2000 Focus Group meeting minutes were submitted to AlphaTRAC, Inc.

It was also requested that the meeting minutes format be changed to model those of the RSAL Oversight Panel's.

### Water Management at Rocky Flats

John Rampe made a presentation and entertained questions and comments concerning the background for water management at Rocky Flats. Topics treated included:

- Water flow synopsis
- Summary of ponds as water management system
- Regulation of surface water quality.

A copy of Mr. Rampe's presentation is included as Appendix B to these minutes.

Following is a summary of the question and answer session during and following Mr. Rampe's presentation.

Comment (C): The new National Pollutant Discharge Elimination System (NPDES) permit provides for a single point of compliance for water outflow - the outflow of the site's Sewage Treatment Plant.

Question (Q): What is the status of the evaluation of the 881 exceedance?

Answer (A): Monitoring data for May 11 through July 17, 2000 are currently being analyzed.

Q: Is that the usual turnaround time for analysis?

A: Yes.

Q: Where does surface water runoff go after leaving Rocky Flats?

A: The water flows around the drinking water reservoirs and flows along Walnut Creek and Woman Creek and eventually to the South Platte River.

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Q: What is the evaluation process when there is an exceedance at a Point of Exceedance (POE)?

A: An investigation is conducted. Example - Identify the cause of the exceedance and include the source in a clean-up project.

Q: How far do you go in your investigating?

A: We look at historical data and recapture important values. The source of exceedance is then dealt with.

When an episodic incident occurs in an area which exceeds small-scale water improvement relationship, Rocky Flats discusses the issue with regulators.

Q: What is the objective for a POE?

A: The objective is to make sure that key points are monitored to identify trends, identify impacts from remediation, and evaluate effectiveness of remediation.

C: Rocky Flats could have POEs after Record of Decision (ROD) / closure.

Q: What areas cause most concern for water quality?

A: GS-10 (Industrial Area)  
- Northeast and East Industrial Areas  
- Some unexpected locations  
- 903 Pad and associated hillside

C: A Policy Question: Where, when, and how will Points of Compliance (POC) be measured after closure?

Q: Do POEs become POCs at closure of RFETS?

A: EPA: yes; CDPHE: yes. Exact locations for POCs onsite may be set at same or different locations. Ponds would be regulated as waters of the U.S.

### Some Options for Protecting Water Quality

John Rampe presented possible alternatives for meeting surface water standards for plutonium and americium:

- Removal of soil is sufficient to meet standards
- Impoundment and active management, potentially with treatment

- Watershed improvement
- Passive sediment removal with contours or wetlands
- Upstream (Industrial Area) recontouring and revegetation

Mr. Rampe summarized advantages and disadvantages for each alternative (see Appendix C).

### **Policy Discussion: What Does "Meeting the Water Quality Standard" Mean?**

It was suggested that the discussion of alternatives for meeting water quality standards begin by examining "What does meeting the water quality standard mean?" The Focus Group discussed this question; members identified several alternatives:

- Compare a 30-day moving average at each POC to the 0.15 pCi/l standard (the current approach)
- Compare an average for some period other than 30 days at each POC to the 0.15 pCi/l standard
- Compare each individual water sample at each POC to the 0.15 pCi/l standard
- Meet 0.15 pCi/l some specified percent of the time (based on risk)
- Establish a different standard than 0.15 pCi/l, perhaps based on the soil erosion study results
- Revise or confirm the standard based on the risk analysis that leads to the standard
- Develop tailored, specific standards and remediation strategies for different areas on site

The following comments were also made during the discussion:

- Eliminating or leaving the source in place is a key issue
- A large safety factor should be included in whatever standard is developed
- The total risk, including pathways other than surface water, should be considered in setting the water quality standard
- The siting of POCs is an important consideration

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- The Water Quality Commission will establish the standard. The Commission will be a key player in any discussion regarding modification of the standard.

Representatives from EPA and CDPHE were asked their position on changing the water quality standard. The representatives indicated that neither agency supports changing the water quality standard.

The Focus Group identified five key factors that must be considered in evaluating or establishing a water quality standard:

- Basis for standard (e.g., risk)
- Sampling methodology
- Averaging period to be used in sampling
- Sampling locations
- Laboratory analysis methodology and quality standards

A member of the Focus Group asked if the Erosion Transport Model's output will be sufficient to demonstrate that the site will meet water quality standards. DOE responded that the model will be a tool, which will help in deciding where to put additional monitoring stations.

The Focus Group requested the following information concerning the water quality standard:

- Surface water sampling methodology and relationship to standard (Joe Legare)
- Risk basis for 0.15 pCi/l water quality standard (Steve Gunderson)
- Laboratory analysis quality (Dave Shelton)

The group agreed to close the discussion with determination of the alternatives for standard setting, the key factors in setting a standard and the requests for additional information. The Group will defer further discussion of the water quality standard until a future meeting.

**Topic for Next Meeting**

The Focus Group agreed to continue it's discussion of "Alternatives for Meeting the Water Quality Standard" at it's September 13, 2000 meeting. The discussion will focus on strategies involving the alternatives for meeting surface water standards for plutonium and americium presented earlier in this meeting.

### **Actions**

The following actions were identified by the Focus Group:

- Confirm total and maximum americium 241 and plutonium 239/240 values for station GS03 as shown in Appendix D-3 of 8/30/00 packet (Dave Shelton)
- Derivation of 140 pCi/l PPRG (from 1996 IGD document) (now 21 pCi/l) for onsite surface water, including risk basis (Dave Shelton)
- Sampling methodology for monitoring / evaluating cumulative effects from multiple contaminants (John Rampe)
- A rough first look at water balance (Bob Nininger)
- Surface water sampling methodology and relationship to standard (Joe Legare)
- Risk basis for 0.15 pCi/l water quality standard (Steve Gunderson)
- Laboratory analysis quality (Dave Shelton)

### **Radioactive Soil Action Level Update**

Russell McAllister, DOE, updated the group on the status of the RSALs review. Other agency updates were not given due to lack of time.

### **Adjournment**

The meeting was adjourned at 6:30 p.m.

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**Appendix A  
Meeting Attendees**

**Appendix B  
John Rampe Presentation  
Water Management at Rocky Flats**



**Appendix C  
John Rampe Presentation  
Some Possible Alternatives for Meeting the Surface Water  
Standards for Pu and Am**

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Attachment B**

Title: August 16, 2000 Meeting Minutes

Date Presented: N/A

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**Introduction**

Paul Hartmann of the U.S. Department of Energy (DOE) opened the meeting with welcoming remarks and introduced Reed Hodgin and Christine Bennett of AlphaTRAC, Inc. Reed Hodgin will act as Facilitator and Process Manager for the Focus Group; Christine Bennett will act as Administrator for the Focus Group.

Paul offered copies of the RFCA Radionuclide Soil Action Levels (RSALs) review summary, and stated that anyone could sign up to be on the RSAL review mailing list.

Reed led introductions of all participants at the meeting. A participants attendees list is included as Attachment A to these minutes. Reed then reviewed ground rules for the Focus Group and summarized the Agenda for the evening. The Agenda as issued in the meeting packet included the following topics:

- Introduction and agenda review,
- Review of regulatory timeline,
- Discussions on remedial action objectives, and
- Review of syllabus for upcoming meetings.

Reed also presented a set of meeting guidelines that he will use for each focus group meeting.

**Problem with Waste Shipment to Waste Isolation Pilot Plant (WIPP)**

John Rampe of DOE announced that a waste shipment from the Rocky Flats Environmental Technology Site (RFETS) to the WIPP had developed a crack in the trailer in the unit and was stopped at an inspection point south of Pueblo, Colorado. He stated that there was no indication of any risk to the integrity of the shipping containers and indicated that additional information will be made available as it is known.

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**Facilitation and Administrative Process**

Reed Hodgkin next made a presentation and entertained questions and comments concerning the process of the RFCA Stakeholder Focus Group, with an emphasis on facilitation and administration. Topics treated included:

- Purpose,
- Participants,
- Core Policy Discussion,
- Scope
- Policy-oriented questions,
- The big issues, and
- Facilitation / administrative support.

There was a discussion among members of the Focus Group concerning the specific expectations for the Focus Group by the sponsoring agencies (Colorado Department of Public Health and Environment (CDPHE), U.S. Environmental Protection Agency (EPA), and DOE. There was also a request for information on how Focus Group deliberations would be used in cleanup decision-making at RFETS.

Joe Goldfield submitted three documents to the Focus Group:

- Comments on Proposed Water Interim Measures / Interim Remedial Action Plan 903 Pad, Mound, and East Trenches,
- 881 Hillside Cleanup Exposure of Workers and the Community, and
- Quantity of Plutonium 239/240 in a Portion of 903 Pad Soil.

He asked that DOE provide a response concerning the mass of plutonium in the 903 Pad area.

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**Review of Regulatory Timeline**

Dave Shelton of Kaiser-Hill presented a conceptual regulatory timeline for cleanup of RFETS. His key point was that it is currently very early in the decision-making process for cleaning up Rocky Flats. He emphasized that the Focus Group has been established and is taking part in policy discussions at this early stage so that the community is fully involved in and informed about the decision-making process throughout.

**Discussions on Remedial Action Objectives**

John Rampe of DOE presented an overview of remedial action objectives for groundwater, surface water onsite, surface water offsite, surface soil, and subsurface soil. He related remedial action objectives to CERCLA's nine decision criteria. He also addressed the relationship between the CERCLA decision criteria and RSALs. He stated that when soil concentration levels exceed Tier 1 criteria, remedial action must be taken. No remedial action is necessary if soil concentrations are below Tier 2 levels. He indicated that soil concentrations greater than Tier 2 but less than Tier 1 represent a region where discretion may be applied in identifying and taking remedial actions. It is in this area that the nine CERCLA criteria will be used to guide the discretionary decision-making.

A discussion on remedial action objectives and CERCLA criteria followed. The questions, answers, and comments are summarized below.

Q: Are the nine CERCLA criteria applied sequentially to remedial action decision-making (are the nine criteria listed in priority order)?

A: Yes, the first two decision criteria are the essential criteria: 1) overall protection of human health and environment; 2) compliance with ARARs. Criteria 3 through 9 are considered balancing criteria and are applied after the first two criteria are evaluated.

Q: What process was used to evaluate remedial technology for the 903 Pad cleanup?

A: A search was made for available technologies. Not a lot of available technologies were found. The technologies that were identified were reviewed to determine if their development and application would be consistent with a 2006 timeframe. This process led to the current options of remedial technologies.

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- C: Stakeholders in the community wish to have input to the selection of technologies for remediation of the 903 Pad.
- Q: Is a presumed land use selected before establishing remedial action objectives or are remedial action objectives established first, leading to land use choices?
- A: In the current RFCA decision-making process, presumptions must first be made about land use to start the cycle.
- C: The relationship between land use and remedial action objectives—which one drives the other—is a key policy issue for cleanup at RFETS.
- C: Perhaps remedial action objectives should be developed against the CERCLA decision criteria assuming residential (unrestricted) land use first. Then, if achievable remedial action objectives cannot be developed for residential land use, institutional controls could be examined.
- Q: Does the RFCA prohibit the use of institutional controls?
- A: No. RFCA allows institutional controls and the discretionary decision-making in the area between Tier 1 and Tier 2.
- C: An ideal is to try for the best cleanup period, then work backward from there to the best achievable cleanup. It appears that RFCA allows this approach.
- C: It appears that the stewardship process could be linked to CERCLA through the nine decision criteria. The stewardship process could be directly related to criteria 3 (Long-term effectiveness and permanence), with balancing influences from decision criteria 7, 8, and 9 (Cost, State acceptance, and Community acceptance).
- C: It should be noted that land use is not one of the nine CERCLA decision criteria.
- C: An idea: Could we get maximum cleanup at Rocky Flats by applying the CERCLA decision criteria independent of land use, with a focus on Criteria 1 (Overall protection of human health and the environment); 3 (Long-term effectiveness and permanence); and 4 (Reduction of toxicity, mobility, or volume)?
- C: We need a methodology for ranking CERCLA criteria and choosing remediation approach based on results of applying CERCLA criteria.

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- C: It would be useful to apply the CERCLA criteria to each of a range of land use options and examine the outcome.
- C: It should be our desire to cleanup RFETS for any use (unrestricted) unless such cleanup cannot be accomplished.
- Q: What organization administers each of the nine CERCLA decision criteria?
- A: Responsible organizations are addressed as part of the CERCLA process and identified in the Record of Decision (ROD).
- Q: Why is there such a large area of discretionary decision-making between Tier 1 and Tier 2?
- A: As the soil contamination level (and therefore the health risk) goes down, more options are available to produce the level of protection desired.
- Q: Are the nine CERCLA decision criteria and the remedial action objectives considered minimum requirements for cleanup at RFETS?
- A: The remedial action objectives define the overall objectives for cleanup, considering all requirements and needs. CERCLA decision requirement 1 (Overall protection of human health and the environment) and (Compliance with ARAR), are considered the minimum requirements under CERCLA. Decision criteria 3 through 9 are considered balancing criteria. Additional minimum requirements for cleanup are specified in the RFCA.
- C: How CERCLA decision criteria 9 (Community acceptance) will be effectively accomplished needs to be fleshed out.
- C: The RSAL links only to decision criteria 1 on the CERCLA list of nine. The RSAL is considered a separate criterion designed to trigger remedial action based on risk.
- C: A policy question: Should the RSAL be developed independently of land use? We could start by developing most restrictive RSAL criteria and then work back to less restrictive values as necessary.
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- C: It is important to remember that protection of surface water must be evaluated as its own issue, separate from the RSALS.

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**Topic for Next Meeting**

The Focus Group decided to discuss the policy issues associated with water quality protection at the August 30, 2000 meeting.

The following potential agenda and / or packet items were identified for this discussion:

- Application of the surface water quality standard onsite at RFETS,
- Identification of areas on the site where water quality will drive cleanup,
- Range of options for protecting surface water quality,
- The technical / regulatory framework for water quality protection (stream flows, monitoring methods, etc.)
- A summary of the current discussion among the agencies on water quality standards.

**Actions**

The following actions were identified by the Focus Group:

- Response from DOE to 903 Pad Pu calculation (DOE)
- Kaiser-Hill contract language concerning onsite water quality (DOE / Kaiser-Hill)
- Map showing areas of site where water quality will drive cleanup (DOE)
- Summary of water quality exceedances and explanations, including back to 0.05 standard (if possible) (DOE)
- Regulatory framework for surface water protection, water flow patterns, and surface water monitoring program (DOE / Kaiser-Hill)
- Implications of cleaning up to 35 pCi (DOE / Kaiser-Hill)
- Basis and intent of RSALs (Tier 1 and Tier 2) (DOE)